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**SUBSTITUTE SPECIFICATION**

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5        This application is a divisional of U.S. Serial No. 09/096,749, filed June 12, 1998, which claims priority under 35 U.S.C. 119(e) to provisional application U.S. Serial No. 60/049,410, filed June 12, 1997. These applications are incorporated herein by reference.

The present invention relates generally to the field of the production and selection of binding and catalytic polypeptides by the methods of molecular biology, using both combinatorial chemistry and recombinant DNA. The invention specifically relates to the generation of both nucleic acid and polypeptide libraries derived therefrom encoding the molecular scaffolding of Fibronectin Type III (Fn3) modified in one or more of its loop regions. The invention also relates to the "artificial mini-antibodies" or "monobodies," i.e., the polypeptides comprising an Fn3 scaffold onto which loop regions capable of binding to a variety of different molecular structures (such as antibody binding sites) have been grafted.

## Antibody structure

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